

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN H. DETRICK and
FREDERICK T. CARNEY, JR.

Appeal No. 2000-1386
Application No. 09/078,477

HEARD: August 15, 2002

Before LIEBERMAN, DELMENDO, and POTEATE, Administrative Patent Judges.

POTEATE, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 7 and 16-19, which are all of the claims pending in the application.

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Claims 7, 16 and 17 are representative of the subject matter on appeal and are reproduced below:

7. A process for coating a granular material with a coating composition comprising rotating said granular material to provide a cascading flow of said granular material having a top moving layer, injecting at least one coating component into said cascading material at the top moving layer of said cascading granular material, and recovering said coated granular material for subsequent use.

16. A process for coating a granular material with a polymer coating comprising rotating said granular material to provide a cascading flow of said granular material, applying a first and second coating component into said cascading granular material from a plurality of individual applicators, said first and second coating components being selected to react with one another to form a polymer on the surface of said granular material at the temperature of said components and granulars, and recovering a polymer coated granular material for subsequent use.

17. The process of claim 16 wherein the application of said first and second coating component is by injecting said coating components into the cascading material at a top moving layer of said cascading granular material.

The examiner relies on the following references:

Huttlin	4,444,810	Apr. 24, 1984
Moore	4,969,947	Nov. 13, 1990

GROUNDS OF REJECTION

1. Claim 7 stands rejected under 35 U.S.C. § 103 as unpatentable over Huttlin.

2. Claims 7 and 16-19 stand rejected under 35 U.S.C. § 103 as unpatentable over Moore in view of Huttlin.

We affirm as to both grounds of rejection

BACKGROUND

The invention relates to an improved process for uniformly coating particulate granules with a coating material. Specification, page 2. According to appellants, coatings are conventionally applied to granular material using spray nozzles. The drawback of such spray nozzles is that application of the coating tends to be uneven and may cause clumping of the particles. Specification, page 5. Appellants have found that

coating components are best applied to . . . granules by injecting separately and sequentially the plurality of coating components into a cascading mass of . . . granules, which are moving continuously through a horizontal rotating cylindrical drum, immediately below the surface of the granules through a plurality of injectors with the flow characteristics of each injector being separately controlled. The cascading of the granules is in a controlled pattern which evenly distributes the injected liquid coating materials.

Id. In accordance with the invention, "[a]t least one coating component, and preferably two coating components, of the coating composition is injected into the cascading material at the top moving layer." Appeal Brief, Paper No. 10, received February 17, 2000, page 3.

DISCUSSION

The examiner relies on Huttlin for a teaching of:

a method of coating a granular material with a coating material where the granular material is rotated and cascaded in a horizontal rotating drum and a coating material is injected into what is considered a top moving layer of the cascading granular material, with a plurality of nozzles, where the coating material wets the granular material.

Examiner's Answer, Paper No. 11, mailed March 17, 2000, page 3 (citations omitted). The examiner maintains that Huttlin teaches each of the claim 7 method steps with the exception of collecting or using the coating granules. See id. The examiner takes the position that this latter step is well known and conventional in the art¹ and, therefore, it would have been obvious for one of ordinary skill in the art at the time of appellants' invention to

¹Appellants do not dispute this finding.

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use the coated granules produced in the Huttlin process to achieve the invention as claimed. Id. at pages 3-4.

Appellants concede that Huttlin teaches a body of granular material 44 which is being rotated and that "a solvent vapor is sprayed by nozzle 42 onto the material 44 just in front of the immersed body 46 and/or is introduced to the material underneath from the inlet opening 74." Id. at page 5 (emphasis added).

However, Appellants urge that the claimed invention is not obvious because

there is no disclosure of having a rotating granular material to provide a cascading flow of the rotating granular material and injecting a coating component into the top surface of this cascading flow. At best, the coating material in Huttlin is flushed up into the granular material.

Appeal Brief, page 6 (emphasis added).

In deciding patentability issues under 35 U.S.C. § 103 "[a]nalysis begins with a key legal question -- what is the invention claimed?" Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567-68, 1 USPQ2d 1593, 1597 (Fed. Cir.), cert. denied, 41 U.S. 1052 (1987). In order to determine what is claimed, we must first determine the meaning of the following claim terms:

1. cascading flow;
2. top moving layer; and
3. injecting

In general, the terms in a patent claim are given their ordinary meaning as used in the field of the invention unless the text of the patent indicates that a word has special meaning. Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342, 60 USPQ2d 1851, 1854 (Fed. Cir. 2001) (citations omitted). A patentee may be his own lexicographer provided that he sets forth an explicit definition for a claim term in the patent specification. Id. (citations omitted). We have reviewed the specification, but have found no indication that the inventors intended anything other than the ordinary meanings of the aforementioned terms, which, in the context of the present invention, are generally understood to mean:

1. Cascading: something falling or rushing forth in quantity. Webster's Third New International Dictionary 345 (¹cascade 3a) (1971).

Flow: an easy smooth and uninterrupted progress or movement. Id. at 875 (²flow 3a).

2. Top: the highest point, level or part of something. Id. at 2409 (¹top 1a(1)).

Moving: that which is not fixed or stationary but advances or progresses. Id. at 1480 (moving 1a and 1b).

Layer: one thickness, course, or fold laid or lying over or under another. Id. at 1281 (¹layer 2a).²

3. Injecting: to throw, drive, or force in. Id. at 1164 (inject 1a).

Huttlin teaches that:

wetting medium discharged from a nozzle 42 is sprayed from above onto the upper layer of a material 44, while the drum 10, which rotates in the direction of the arrow F in FIG. 1 entrains the lower layer of the material 44 upwards in the direction of rotation and causes the *upper layer of the material to flow downwards* in the direction of the arrow G at an angle about 45° to the horizontal.

Column 4, lines 46-53 (emphasis added). Huttlin further teaches that the nozzles 42 may be directed upwards from the immersion body 46 and, therefore, into the upper layer of the material 44. See column 5, lines 56-61. Thus, Huttlin teaches a smooth movement of material (cascading flow) and discharge (injection) of a wetting medium into the upper (top) moving layer. Accordingly, we agree with the examiner's conclusion that Huttlin renders obvious the invention as claimed.

Claims 7 and 16-19 are further rejected under 35 U.S.C. § 103 over Moore in view of Huttlin.

²The specification contains no limitations on the amount/level of granular material which constitutes the "top moving layer."

The examiner relies on Moore for a teaching of "a process of coating granules with a polymer coating, where the polymer is formed by first introducing first and second reactive materials to the granules and reacting them to form the polymer coating on the granules, where the first and second reactive material are applied separately and simultaneously." Examiner's Answer, page 4 (citations omitted). The examiner further relies on Moore for a teaching "that the coating of the granules can be performed by any number of processes, including a rotary drum." Id.

The examiner concedes that Moore does not disclose applying the coating materials to a cascading flow of granules using a rotary drum, but maintains that it would have been obvious to one of ordinary skill in the art to have used the rotary drum process of Huttlin in order to simultaneously and separately inject the first and second coating materials into a cascading flow of granules. Id. Further, the examiner maintains that it would have been obvious to have collected and used the coating granules as it is well known and conventional in the art to do so. Id.

Claim 7

Having found claim 7 obvious in view of Huttlin, we need not further consider the present rejection with respect to this claim.

Claim 16

Appellants argue that claim 16 is allowable because it requires application of both a first and second coating component from a plurality of applicators into the cascading flow of granular material to form a polymer. Appeal Brief, page 7. Appellants maintain that Huttlin does not disclose this feature and that Moore teaches applying coating to the granular material by spraying. Id.

Appellants' arguments fail for several reasons. First, claim 16 requires the step of "applying a first and second coating component" and does not require "injection" into the cascading granular material. During prosecution, patent claims are given their broadest reasonable interpretation consistent with the specification and claims. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). We have reviewed the specification, but have found no indication that the inventors intended anything other than the ordinary meaning of the term "applying," which, in the context of the present invention, is understood to mean: "to place in contact, lay or spread on." Webster's, supra, page 105 (apply 1e(1)). We concur in the examiner's finding that Moore's teaching of introducing first and second reactive materials to the granules renders obvious the step of "applying."

Secondly, appellants improperly attempt to overcome the rejection by attacking the references individually when the rejection is based on a combined teaching. See In re Young, 403 F.2d 754, 757, 159 USPQ 725, 728 (CCPA 1968). In this case, we conclude that the Examiner has established the requisite motivation to utilize Huttlin's rotary drum process in Moore's process of coating granules with a polymer coating³, i.e., "the expectation that the rotary drum would effectively coat the granules of Moore, as it had in Huttlin" (Examiner's Answer, page 4).

Finally, contrary to appellants' assertion, Huttlin does, in fact, teach the use of "a plurality of nozzles 42" for application of the coating to the granular material. Column 4, line 43. Accordingly, we find that the examiner has established a prima facie case of obviousness with respect to claim 16, which appellants have failed to rebut.

Claims 17-19

Claim 17 depends from claim 16 and includes the further limitation that the first and second coating components are applied by *injecting* the coating components into the cascading material at the top moving layer. We find that this limitation fails to

³See Moore, column 7, lines 4-47, for a discussion of the polymer coating.

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distinguish over the cited references for the reasons set forth above with respect to claim 7. Accordingly, we affirm the examiner's rejection of claims 17-19 as obvious.

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

PAUL LIEBERMAN)	
Administrative Patent Judge)	
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)	
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)	BOARD OF PATENT
ROMULO H. DELMENDO)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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Letty

JUDGE POTEATE

APPEAL NO. 2000-1386

APPLICATION NO. 09/078,477

APJ POTEATE

APJ LIEBERMAN

APJ DELMENDO

DECISION: **AFFIRMED**

PREPARED: Aug 1, 2003

OB/HD

PALM

ACTS 2

DISK (FOIA)

REPORT

BOOK